

# (19) United States

## (12) Patent Application Publication (10) Pub. No.: US 2019/0033923 A1 Wang et al.

Jan. 31, 2019 (43) Pub. Date:

### (54) COMPUTER WITH KEYBOARD

(71) Applicant: Apple Inc., Cupertino, CA (US)

(72) Inventors: Paul X. Wang, Cupertino, CA (US); Alex J. Lehmann, Sunnyvale, CA (US); Zheng Gao, Sunnyvale, CA (US)

(21) Appl. No.: 16/045,651

(22) Filed: Jul. 25, 2018

## Related U.S. Application Data

- (63) Continuation of application No. 15/990,508, filed on May 25, 2018, now abandoned.
- (60) Provisional application No. 62/537,350, filed on Jul. 26, 2017.

#### **Publication Classification**

(51) Int. Cl. G06F 1/16 (2006.01)H03K 17/96 (2006.01)

U.S. Cl. CPC ...... G06F 1/1662 (2013.01); H03K 17/9618 (2013.01); G06F 1/1656 (2013.01); G06F 1/1637 (2013.01); G06F 1/1616 (2013.01)

#### ABSTRACT (57)

A device may include a display portion that includes a display housing and a display at least partially within the display housing. The device may also include a base portion pivotally coupled to the display portion and including a bottom case, a top case coupled to the bottom case and defining an array of raised key regions, and a sensing system below the top case and configured to detect an input applied to a raised key region of the array of raised key regions.

